

# MINES AND PROSPECTS UTAH'S GREATEST MINING INDUSTRY

## THE CROP OF COPPER

December's Output Makes a New Record.

## HIGHLAND BOY PROMOTIONS

Luscious Spread of Black Diamonds in Town.

Century Reports With Its Largest Bar of Gold—Activity in Pearl District, Idaho—Notes.

December among the copper producers closed on an output aggregating 2,515,680 pounds of bullion, in which was contained the usual percentages of gold and silver, the presence of which latter adds more to the value of the product than to the volume. The Utah Con., or Highland Boy, not only maintained its position at the top of a category which was created by it, but strengthened its position up there, and with an output which approximated 1,400,000 pounds made a new record for itself without reference to the record for the valley. The Bingham Con., during the same period showed a production of 922,680 pounds, with but three furnaces in commission and reducing about 500 tons of ore daily, while from the United States company's plant there was sent out to the Eastern refinery 742,000 pounds of bullion, the metallic contents of which, it is claimed, exceed that of any of the same variety produced in the State. In addition to the output from the independent plants, there was forwarded by the American Smelting and Refining company 750,000 pounds of the red stuff, nor is the splendid aggregate from all sources during the month more than a wholesome representation of an increase that awaits the new year. The output of the last week of the month reached a total, indeed, of 253,255 pounds, or on a basis of 50,000 pounds of copper for the year, a perceptible increase over the production on which the previous year was checked out, the record standing as follows:

Bingham Con.	24,125
United States	191,750
Utah Con.	261,750
American	290,000
Total pounds	967,675

## WELL-EARNED PROMOTIONS.

New Year Is Good to Members of Manager Channing's Staff.

In recognition of services long rendered the company by them, Manager R. H. Channing of the Highland Boy yesterday morning announced the promotion of P. L. Williams, Jr., to a position as superintendent of the bonanza at Bingham, C. L. Morris to that of superintendent of the smelter in the valley. It was a steady and efficient service by each of the gentlemen that merited it, said Manager Channing. Mr. Williams having previously discharged the responsibilities of assistant in the position to which he has been advanced, Mr. Morris those devolving upon an assistant superintendent of the smelter. Each is a recognition upon which their friends will congratulate them, while certainly no one was more pleased with the conditions which made the promotions possible than was the management. Each a young man, the new year began for them with a full measure of well-merited encouragement.

## CHLORINATION AT MERCUR.

Investors of New Process Seek an Opening for It There.

Representatives of a new process for the reduction of gold-bearing ores and with chlorination as the base are making an effort to introduce it at the properties of the Con. Mercur Mining company. Mercur, its exponents, contending that it is capable of better results at less cost than that now employed. Mill men generally, and of which there are a large number in this locality, are inquiring into the method, which may be tried out in one of the experimental plants that have been installed at various points in the city. Until it is demonstrated, however, that there is something positively and ineffectively better than that now in use the cyanide process will continue at the Con. Mercur.

## BLACK DIAMONDS GALORE.

A \$27,000 Spread From the Mysterious Deposits in Brazil.

With a collection of "black diamonds" of the value of \$27,000 or more tucked away in his cashmere, Capt. C. W. Kennedy, representing the importers of the lustreless gems, arrived in town yesterday morning, to begin the cultivation of a field which is now engaging the attention of the world. Since the late war, through which he carried a market, the Captain has been dealing

## THE TRIBUNE NEWS STANDS

BOSTON—Crawford, Parker.  
CHICAGO—Auditorium, Great Northern.  
DENVER—Brown Palace.  
KANSAS CITY—Midland, Coates.  
LOS ANGELES—The Angeles, B. F. Gardner.  
MINNEAPOLIS—West Hotel.  
NEW YORK—Waldorf-Astoria, Imperial, Astor House.  
OMAHA—The Millard, The Paxton.  
PORTLAND, OR.—Portland Hotel.  
ST. LOUIS—Plumier, Southern.  
SAN FRANCISCO—Palace.  
SEATTLE—Hotel Northern.  
WASHINGTON—Willard, Raleigh.

In these teeth for the "diamond drill," etc., and has seen them advance from a few dollars to nearly \$50 per carat. No substitute has been found, however, and with their increased use, the price of the article in the production of which Brazil continues to exercise a monopoly, has advanced. The visitor has a fund of narrative, interest and instructive, upon the repeated efforts of those to penetrate the region from which the precious, although lustreless, stone is derived that some knowledge might be obtained about its occurrence, but each has ended at a dead-line that has been so long maintained by the Brazilian authorities. A cousin of one of the importers, upon which consumption had placed its deadly seal, determined to lay down his life in an effort to get beyond the line, but he got no nearer than the point where he was arrested, the precious stone, which he had been seeking to break into the secret, Capt. Kennedy will carry among the mining men for several days, having, meantime, an old comrade in Col. Reed of this city.

## IN PEARL DISTRICT.

Lincoln Mill Pounding Out Fine Quality of Good Concentrates.

John T. Hodson, manager of the Lincoln Mining company's properties and plant in Pearl district, out of Boise, Ida., is among the Utah contingent in the neighboring State that came to roast during the holidays and which is again centering of the Lincoln Manager Hodson says it is now producing about ten tons of gold-bearing concentrates, carrying not a little silver, with an insignificant percentage of lead, daily, and that the capacity of the mill will be increased the present season is most likely.

The Checkmate mill, that had been hung up for several weeks, was scheduled to go into commission during the week, said Mr. Hodson, and that others will be erected the present year quite well assured. In Pearl district, adjoining Pearl, the usual activity is reported at this time, while in each of them much work has been projected. Capt. Stallings, who is now at the Lincoln, after a visit East, will be joined by Mr. Hodson on Monday.

## MR. HAMMOND'S COMING.

Much Interest Manifested by Mining Men in His Arrival.

The coming of John Hays Hammond as a permanent resident of Salt Lake City and with general offices in the McGovern block, which event is scheduled for the present month, is being looked forward to with much interest by local miners and certainly his coming will be made a cordial one. There is no concealing the fact, indeed, that local interests feel that they have been in the hands of Mr. Hammond in the selection of Salt Lake as headquarters, while there is a sentiment foreign to the city, that it is the seat of the eminent geologist that the salaries alone commanded by him afford an income exceeding \$20,000 a year, and those who have the pleasure of his acquaintance hope to see this multiply as they grow older. Accompanying him is a staff of expert mining engineers and a mining man, which has been organized to assist him, and to them, as well as their chief, Salt Lake will open with its embrace.

## DISCOVERED IN CHICAGO.

Material for Copper Company's Mill Had Gone Into Winter Quarters.

Since November 21st last the management of the Utah Copper company has been awaiting the arrival of the last carload of structural steel for use in the new plant now going up in Bingham canyon. The consignment was loaded in Chicago. Yesterday advice came to Superintendent Janney that a tracer, after following the routes between Chicago and Ogden, had found the consignment in the yards at Chicago. There it had been since November 21st, when the management of the Copper company was assured that it had started west under the company's name. Unable to wait on it long, without impeding machinery already on the ground, the management will today appeal to the local market for its needs and in the event they are secured the completion of the mill should be permitted to proceed without further delay and the reduction of ores begun in February.

## SOME CENTURY GOLD.

Biggest Bar of Bullion Ever Pounded Out of the Company's Rock.

When Manager Madsen, whose perseverance and intelligently directed efforts have placed the Century of Park valley among the dividend-payers, came in from camp on Wednesday night last he brought with him a bar of gold bullion larger than any in the history of the undertaking, an official of the company fixing its value at over \$500. This cannot but verify all which has been said recently concerning the improvement in the quality of the rock upon which the stamps are dropping. Not hardly placing the average at \$12 per ton, with the body one of unusual if not unprecedented strength. Although the mine has been doubling "diamonds," the Century has apparently attained a prominent position among the bread-winners.

## PYRITIC SMELTING.

Wonderful Progress Made in the Furnaces of This State.

Pyritic smelting, in such extensive practice in Salt Lake valley, differs from the ordinary smelting chiefly in the use of the sulphur in the pyrite and other sulphides present in the charge, as fuel, says the Mining and Scientific Press of San Francisco, whereas in the ordinary smelting methods, it is desirable to have most

of the ore of the charge oxidized before it enters the furnace, and the charcoal or coke are employed as fuel, with some waste copper is usually produced, but this depends to a great extent upon the character of the ore. In lead smelting the ores are reduced to metallic lead, which carries down any precious metals that may be present, and also the copper if any. Hot blast is used in each of these several kinds of smelting though there appears to be a disagreement among smelters as to the degree of heat most beneficial to the process. It is claimed that experiments have shown that a very hot blast does not pay in proportion to the savings in fuel, and that the heat to a high degree. In some instances the heat of the furnace itself is employed to heat the blast, but it is not generally the practice, special stoves for heating the air being employed for the purpose. It is generally the aim of the smelter to have the gases escaping from the top of the charge at a relatively low heat. The gases from copper furnaces are not inflammable, but those of iron furnaces are, and the latter are utilized in an economical manner. The idea of hot blast in copper smelting is to heat the blast by means of the hot slag from the copper furnace, it is said to be more feasible than the employment of furnace gases for this purpose.

## THE TONOPAH ORES.

Smelting the Process, and Means to Be Found in Salt Lake Valley.

The experiments necessary in order to decide on what are the best means for the reduction of Tonopah ores have, beyond doubt, retarded developments in this important mining district. The results, however, will be favorable to profitable mining operations in the future. It is now pretty well settled that there will be no more smelting in the region which will give better results from smelting than from milling processes, because of the high percentage of recovering to be obtained by the former. Nevertheless, it is also apparent that there is a great deal of Tonopah ore which will give more profitable returns from milling than from smelting, because of the greater expense incidental to smelting. Of course, no tests other than those actually conducted in either mill or smelter can be entirely conclusive. Assay values are at best but approximations, since the ores often change in the process of operations, and at times introduce new factors which alter the results. There can be little doubt that there is plenty of ore in Tonopah to justify the erection of both smelting and reduction works, says the Pacific Coast Miner.

However, the ores of the great camp will come to the smelters of Salt Lake valley under a contract with the American Smelting and Refining company for an indefinite period, and the erection of furnaces here will be left to a distant some-time.

## SOME COPPER AVERAGES.

Contents of Utah Ore Compare Most Favorably With the Rest.

The following estimates have been made of percentages contained in the ores of some of the great copper mines of the country: The Calumet and Hecla ore carries 3 per cent copper; the Quincy, 1.5 per cent; the Tamarack, 1.3 per cent; the Wolverine, 1.1 per cent; copper, and the Atlantic, a little more than one-half of 1 per cent copper. These Michigan mines yield no other metal, in considerable quantities, except silver. The big values in gold, silver and copper, the Anaconda carries about 1.5 per cent copper; the Copper Queen, about 8 per cent copper; the United Verde, 7 per cent; the Mountain Copper company in California produces an 8 per cent copper, an income exceeding \$20,000 a year, and those who have the pleasure of his acquaintance hope to see this multiply as they grow older. Accompanying him is a staff of expert mining engineers and a mining man, which has been organized to assist him, and to them, as well as their chief, Salt Lake will open with its embrace.

## ALONG THE SAN PEDRO.

High-Grade Copper Near Kane Springs, on Old Mormon Range.

After a few days spent in town, W. E. Boyd returned to the country near Kane Springs, at the end of the Old Mormon range. He brought in some samples, which yielded 28 per cent copper, besides a little acid and silver, says the Leadville Democrat. While on his last trip he ran onto a great many prospectors, who are examining the country, the route of the San Pedro. They are exploring a distance of thirty miles each side of the route and locating everything that shows values.

## TINTIC ORE SHIPMENTS.

Ninety-Three Carloads Sent From the District the Past Week.

(TRIBUNE SPECIAL.)

Eureka, Jan. 1.—The ore shipments for the week ending December 31st from the Tintic district amounted to ninety-three carloads. The Centennial Eureka heads the list with an output of forty carloads, and the Grand Central at Mammoth comes second with eleven carloads. The output in detail is as follows: Centennial Eureka 44, Grand Central 11, Tintic 1, Laclede 1, Tetra 1, South Swanton 1, Dragon iron mine 1, Lower Mammoth 1, Ajax 1, Carried 1, Victor 1, Eagle & Blue Bell 1, Bullion-Beck 1, Total 93.

## To Build Custom Mill.

A correspondent writing from Sumpter, Or., says:

L. G. Lilley, superintendent of the Baby McKee, states that arrangements have been perfected for starting work on a ton-on custom mill near the Baby McKee property, in the Cable Cove district, early in the spring. It is stated further that the mill will be a large one, and that some people will erect two or three more custom mills in this district. A report from Horanza states that on the 1200-foot level in the crosscut from the shaft a very rich body of ore has been encountered. The report says that the

crosscut entered the body a distance of eighteen feet without encountering either coke or coke, and that assays from the hanging wall side show an average value of \$20, the entire body being good milling ore.

## Mining Notes.

The Utah of Deep Creek has another lot of high-grade silver and lead ore at the smelter.

The directors of the Daily West will meet on Tuesday to post the regular dividend.

Nick Robertson, the mining lawyer and mining man of Tintic, is winding up the holidays in Zion.

The call on the mining exchange today will begin at 10 a. m., instead of half an hour earlier, as in the past.

Managing Director Holden of the United States Mining company is scheduled to return from the East during the next week.

Harry Joseph, manager of the Caribou of Tintic and others, has reached his old home in Indiana on his way westward from Chicago.

E. N. Lehman is in the city on his way to Pennsylvania, after studying and prospecting the region of which Junction, Alaska, is the center.

J. A. Cizek, manager of the Lost Packer group of gold and copper-bearing mines at Lion Creek, Ida., came in from Chicago on his way home.

Heber Hicks of Rexburg, Ida., is back from Park City, where he has interests that are very highly esteemed, and leaves for his home in the north again tonight.

The stockholders of the Silver King will meet in annual session at Park City on January 15th, when officers will be elected and the monthly dividends for the present year fixed.

George Gunn of the American Smelting and Refining company has returned from the district after "taking stock" at some of the bonanzas whose output is coming to his company's furnaces.

Manager George H. Robinson came in from the Yampa smelter, Bingham, where, again last night and reports everything in readiness for the formal blowing in of the new furnace tomorrow.

Unconfirmed rumors of a strike at the Silver Shield of Bingham were plentiful on "the street" during the afternoon and while they were being spread by the serious, a strike is not unlikely in ground now being penetrated.

De La Mar Lodge: A number of prospectors are working about twenty miles above the junction of the Virgin Muddy on the Virgin river. Just what it will amount to remains to be seen, but there are many surface indications and considerable ground has been located.

Harry Monroe, who has been doing a good deal of work for local owners on Lion Creek, says that his work is progressing conservatively on the Northern Light company's group of mines, under the direction of George Weston. He is following the vein down below the new tunnel and is uncovering some milling ore, with bunches of better quality.

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Pembroke-stationery—have been known since '82. The two main features, good goods, fair prices, fair treatment.

## Clothing...

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Shrewd buyers seeking rate values are finding out every day that this small-profit store is the best place to buy clothing. All the new styles of hand-finished, gracefully-fitting clothes that are revolutionizing the ready-to-wear trade. No other store can afford to sell such good clothing for so little money.

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Clothing and Gents' Furnishings.

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## FREE TO WEAK MEN.

Do you admire physical perfection in man or woman? Would you like to feel as if you could muzzle a lion? Let me send you a most interesting book telling how you can be made to feel like a champion. All human weakness comes from a loss of electricity from the body. My electric belt restores it, and my book tells of the gladdening effect it has on you. Cut this ad. out and send it to me. I will mail the book, sealed free. Write today.

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Is especially valuable during the summer season, when outdoor occupations and sports are most in order.

GRASS STAINS, MUD STAINS AND CALLOUS SPOTS

yield to it, and it is particularly agreeable when used in the bath after violent exercise.

ALL GROCERS AND DRUGGISTS.

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## Talk Happiness

The world is sad enough without your woes. If you see this "ad," say so when you write, and we will tell the newspaper man. Then he'll feel happy. If you turn your bad debts to us for collection, we'll collect them; then you'll be happy.

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GEN'L MGR., Merchants' Protective Association, Scientific Collectors of Bad Debts Everywhere. General Offices Top Floor Commercial Block.

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I make no misleading statements or unbusinesslike propositions to the afflicted in order to obtain their money. AN HONEST DOLLAR, HONEST SERVICES AND HONEST RETURNS is my motto.

BLOOD POISON of every character. VARICOCELE, PILES, LOST MANNER, STRICTURE and REFLEX CONDITIONS. I cure these disorders to STAY CURED forever, for less expense, compared with results, and in a shorter time than any specialist in the city. Examinations are free and advice cheerfully given. If you can not call at my office, write for booklet and question list. My cures are guaranteed in writing. Address

COOK MEDICAL CO., 116 S. Main St.

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The word "Burlington" is like "Sterling" on silver. It denotes a high standard.

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## THE RUSH

is over. You can bring your watches and jewelry for repair, and I will see that it is done in first-class manner. If you need anything in watches and jewelry it will pay you to see me.

SAL SICKLE, The Jeweler.

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The fuel required for one ordinary grate fire or stove is sufficient to warm an entire house by HOT WATER circulation.

The boiler requires less attention than does a stove. Cleanly, convenient, operates automatically.

IDEAL Boilers and AMERICAN Radiators.

P. J. MORAN, Board of Trade Bldg., SALT LAKE.

## TIME TABLE

In Effect: Nov. 22, 1903.

From	To	Time
Ogden	Portland	8:30 a.m.
Butte	San Francisco	9:10 a.m.
St. Louis	Chicago	11:55 a.m.
St. Paul	Chicago	4:05 p.m.
St. Paul	Chicago	6:55 p.m.
St. Paul	Chicago	6:00 a.m.
St. Paul	Chicago	10:20 a.m.
St. Paul	Chicago	1:10 p.m.
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MISSOURI